

From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(e))

To:

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Date of mailing (day/month/year) 19 April 2007 (19.04.2007)		IMPORTANT NOTICE	
Applicant's or agent's file reference QN1132.PCT			
International application No. PCT/US2005/034845	International filing date (day/month/year) 27 September 2005 (27.09.2005)	Priority date (day/month/year) 08 October 2004 (08.10.2004)	
Applicant QLOGIC CORPORATION			

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

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KLEIN, O'NEILL & SINGH

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference QN1132.PCT	FOR FURTHER ACTION	See item 4 below
International application No. PCT/US2005/034845	International filing date (day/month/year) 27 September 2005 (27.09.2005)	Priority date (day/month/year) 08 October 2004 (08.10.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant QLOGIC CORPORATION		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input checked="" type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. 441 22 338 82 70</p>	<p>Date of issuance of this report 11 April 2007 (11.04.2007)</p> <hr/> <p>Authorized officer</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">Yoshiko Kuwahara</p> <p>e-mail: pt07.pct@wipo.int</p>
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

13/4

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REC'D 10 FEB 2006

WIPO

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2005/034845

International filing date (day/month/year)
27.09.2005

Priority date (day/month/year)
08.10.2004

International Patent Classification (IPC) or both national classification and IPC
H04L12/56

Applicant
QLOGIC CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1b(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 23399 - 0 Tx: 523656 epmu d

Authorized Officer

Mariggis, A



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2005/034845

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2005/034845

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-14
Inventive step (IS)	Yes: Claims	
	No: Claims	1-14
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Reference is made to the following documents; the numbering will be adhered to in the rest of the procedure:

D1: US-A-6 118 776 (BERMAN ET AL) 12 September 2000 (2000-09-12)
D2: KUMAR MALAVALLI: "HIGH SPEED FIBRE CHANNEL SWITCHING FABRIC SERVICES" PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, vol. 1577, 4 September 1991 (1991-09-04), pages 216-226, XP000562869 ISSN: 0277-786X
- 2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1,5,9 and 12 is not new in the sense of Article 33(2) PCT.
- 2.1 Document D1 discloses, according to all features of independent claim 1 (the references in parentheses applying to this document), a network that allows communication between a proprietary switch fabric (**Note:** Since the term "proprietary switch fabric" is not further defined in the claim and since it is not clarified whether it lacks functionality to initiate login, the "proprietary switch fabric" should be regarded as an "arbitrated loop device" interconnecting multiple external apparatuses to the Fibre Channel switch elements) and a host system (see abstract; figure 13), comprising:
 - a Fibre Channel switch element (see figure 13, reference sign "FABRIC 401") that is operationally coupled to the host system (see figure 13, reference sign "MAINFRAME 405"; column 3, lines 22 to 30) and the proprietary switch fabric (see figure 13, reference sign "ARBITRATED LOOP"), wherein the Fibre Channel switch element's presence is transparent to the proprietary switch fabric when the host system communicates with a target device that is coupled to the proprietary switch fabric (see column 11, lines 6 to 16, especially the passage "The address translation and the routing mechanisms within the Fabric are transparent to N_Ports; figure 13).

Consequently, independent claim 1 is not novel over the disclosure of document D1 (Article 33(2) PCT).

2.2 Document D1 discloses, according to all features of independent claim 5 (the references in parentheses applying to this document), a Fibre Channel switch element that allows communication between a host system and a target device (see abstract; figure 13, reference signs "FABRIC 401" and e.g. "DISK ARRAY") that is attached to a proprietary switch fabric (**Note:** Since the term "proprietary switch fabric" is not further defined in the claim and since it is not clarified whether it lacks functionality to initiate login, the "proprietary switch fabric" should be regarded as an "arbitrated loop device" interconnecting multiple external apparatuses to the Fibre Channel switch elements), comprising:

- a first port that communicates with the target device through the proprietary switch fabric by logging on behalf of the host system so that the proprietary switch behaves as if it was directly communicating with the host system (see column 1, line 66 to column 2, line 8; column 11, lines 6 to 16, especially the passage "The address translation and the routing mechanisms within the Fabric are transparent to N Ports; figure 13); and
- a second port that communicates with the host system and collects host bus adapter identification information, wherein the host bus adapter, HBA, identification information is used to map the first port to the second port so that when the host system communicates with the target device the Fibre Channel switch element is transparent to the proprietary switch fabric (see column 9, lines 1 to 46; column 1, line 66 to column 2, line 8; column 11, lines 6 to 16, especially the passage "The address translation and the routing mechanisms within the Fabric are transparent to N Ports; figure 13).

Consequently, independent claim 5 is not novel over the disclosure of document D1 (Article 33(2) PCT).

2.3 Document D1 discloses, according to all features of independent claim 9 (the references in parentheses applying to this document), a method of communication between a host system and a target device (see abstract; figure 13, reference signs "FABRIC 401" and e.g. "DISK ARRAY") that is attached to a proprietary switch fabric (**Note:** Since the term "proprietary switch fabric" is not further

defined in the claim and since it is not clarified whether it lacks functionality to initiate login, the "proprietary switch fabric" should be regarded as an "arbitrated loop device" interconnecting multiple external apparatuses to the Fibre Channel switch elements), comprising:

- collecting a host bus adapter's, HBA's, identification information during a FLOGI process of a first port that couples the host system to a Fibre Channel switch element (see column 1, line 66 to column 2, line 8; column 9, lines 1 to 46; figure 13); and
- initiating a FLOGI procedure across a second port that couples the proprietary switch fabric to the Fibre Channel switch element, wherein the Fibre Channel switch element initiates the FLOGI on behalf of the host system and the second port records a FC_ID that is received from the proprietary switch fabric (see column 1, line 66 to column 2, line 8; column 9, lines 1 to 46; figure 13).

Consequently, independent claim 9 is not novel over the disclosure of document D1 (Article 33(2) PCT).

2.4 Document D1 discloses, according to all features of **independent claim 12** (the references in parentheses applying to this document), a method of communication between a host system and a target device (see abstract; figure 13, reference signs "FABRIC 401" and e.g. "DISK ARRAY") that is attached to a proprietary switch fabric (**Note:** Since the term "**proprietary** switch fabric" is not further defined in the claim and since it is not clarified whether it lacks functionality to initiate login, the "proprietary switch fabric" should be regarded as an "arbitrated loop device" interconnecting multiple external apparatuses to the Fibre Channel switch elements), comprising:

- collecting world wide number, WWN, information from a host side port of a Fibre Channel switch element that is coupled to a host bus adapter and disabling the host side port after the WWN information is collected (see column 1, line 66 to column 2, line 8; column 9, lines 1 to 46; figure 13);
- initiating a FLOGI process, wherein the Fibre Channel switch element initiates the FLOGI process on behalf of the host system and a fabric side port of the

Fibre Channel switch element records a virtual N Port identifier (see column 1, line 66 to column 2, line 8; column 9, lines 1 to 46; figure 13); and

- mapping a fabric side port of the Fibre Channel switch element with a host side port of the Fibre Channel switch element (see column 11, lines 6 to 16; figure 13).

Consequently, independent claim 12 is not novel over the disclosure of document D1 (Article 33(2) PCT).

- 2.5 It is furthermore noted that even if the applicant would interpret the disclosure of document D1 in a slightly different manner than the examiner has done in the above analysis, and based on his interpretations would come to the conclusion that there are differences between the subject-matter of present claims 1, 5, 9 and 12, and D1 which would then establish novelty, then these differences, even if they could be acknowledged as such, would only be of so minor nature that they could not be the basis for establishing the presence of any inventive step, as D1 discloses the same object and the same type of solution as the present application, and claims 1, 5, 9 and 12 would, even with such a difference in interpretation, not meet the requirements of Articles 33(1) and 33(3) PCT.
- 2.6 For the sake of completeness, it is pointed out that document D2 also discloses the subject-matter of claims 1, 5, 9 and 12. In particular, see:
- D2: Abstract; page 216 to page 219, sections: "Introduction", "Fabric Model" and "Fabric Services"; figures 1 and 2.
- 3 The dependent claims do not contain any additional features, which either alone or in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty or inventive step, because the subject-matter of these claims relates to minor design details and is either derivable from the cited prior art (see documents D1 and D2) or represents standard practice.